TESTIMONY OF
ROBERT DELANEY,
DEFENSE AND STATE MEMORANDUM OF AGREEMENT COORDINATOR
REMEDIATION AND DEVELOPMENT DIVISION,
DEPARTMENT OF ENVIRONMENTAL QUALITY
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SUBCOMMITTE ON FEDERAL SPENDING OVERSIGHT

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I want to thank you for the invitation to speak, Senator Peters, and to Chairperson Johnson and the Committee Members for giving me the opportunity to testify before you. The current crisis we are facing with per- and polyfluoroalkyl substances (PFAS) contamination has troubled me for years. I believe that we are currently suffering as a people because of a lack of protection of our population, especially the fetus, from dangerous chemicals. And it must be remembered that we have more to face than just a problem with the PFAS family of chemicals. The current PFAS crisis just illustrates deeper problems in how we protect ourselves.

One thing that needs to be clear is that I am not a spokesman for the State of Michigan or the Michigan Department of Environmental Quality (MDEQ) on the PFAS issues. I am not at that level in the executive branch of state government, but fortunately Carol Isaacs will be able to fill that role today. I will be speaking as Bob Delaney, state employee, scientist, father and citizen. I will share what I know and believe to the best of my ability.

Until 2010, I was under that false impression that when it came to chemical contamination of the environment that at least America had things under control. Other

countries notably, but not limited to, China and India, were still contaminating their environment and their people, but America had several laws that kept us from creating new chemical contamination problems. We had the Toxic Substance Control Act (TSCA) (known as the cradle to grave legislation) that dealt with the very worst chemicals. TSCA assured that the most dangerous chemicals would be tracked from their creation to their final destruction. We also had the Resource Conservation and Recovery Act (RCRA) to deal with the rest of the hazardous chemicals that we used. In 2010, my comfortable outlook was shattered as I learned about PFAS chemicals.

In March 2010, after learning about the use of Aqueous Film Forming Foam (AFFF), a firefighting foam used by the United States Air Force (USAF) since the 1970's, my team sampled some soil at a former firefighting training site on the Former Wurtsmith Air Force Base in Oscoda, Michigan. To my surprise, the PFOS and PFOA chemicals we were looking for were still there and found at high concentrations in the soil. We would go on to find the PFOS, PFOA, and 19 other compounds in the PFAS family spread across the entire base. In those first years (2010-2012), we found it in every groundwater well on the base except one, in every surface water sample we took, and in every fish we sampled. I had never seen anything like it.

When I asked one of our state toxicologist's which type of criteria might the USAF need to clean up the base to, he looked at the scientific literature and gave me a very preliminary criteria of 100 to 60 parts per trillion. In my business, those low potential criteria could only mean one thing, these chemicals were extremely dangerous. By the time I got the criteria in mid-summer 2010, I already knew that the chemicals were virtually indestructible, extremely important to industry, and were found

around the globe. I realized that the remedies that the USAF had worked on at Wurtsmith to address the other contamination of concern would not control these chemicals and were not protective of people and the environment.

Because I knew I would be telling the USAF that they would need to start all over on cleaning up the base after already spending millions, I, for the first time in my career, questioned my toxicologist's findings. Before that, I had just accepted whatever the toxicologists said. This time, I personally had to be convinced these chemicals were that dangerous. I dove into studying the toxicology of these chemicals and the epidemiology of diseases associated with PFAS. I also happened to be studying autism for personal reasons. The deeper I got into those issues, the more frightened and angrier I became. I realized that I had been duped into thinking that we were being protected by our laws. We have been contaminating our population for years. Over the last 30 years, the rise in America and around the globe of many neurologic disorders, autoimmune diseases, metabolic diseases, infertility, late-term miscarriages, certain cancers, certain birth defects, etc. were real and not some statistical fluke.

I said that I became afraid and angry. PFAS are not the only contaminants to be concerned about, but given their indestructible nature, how useful they are to us in everyday life, and their toxicity, they scare me. In 2010, I began to feel that I was at the edge of the abyss looking into hell with the weight of the world on my shoulders. My fear and anger turned to conviction and determination.

That conviction and determination has led to many actions including the 2012 report to the Director of the MDEQ. People want to know what I think about the State's current efforts on PFAS. Although nothing is perfect, Michigan (along with a few other

states) is shining a light on a problem the nation must face, and Michigan's experience cannot be ignored.

I want to end my talk with 4 points:

1. We need to know exactly what health impacts chemicals are causing in the nation. The citizens do not yet know the extent of the PFAS problem here in Michigan and that information will slowly roll out. They do not know the cost that it will take to address the issue here and around the nation. Fear alone cannot drive us and will not sustain the effort. Only conviction and determination, based upon knowledge, can drive us to work and sacrifice.
2. Looking for someone to blame will become a distraction. Understanding how we could get ourselves into such a mess is important if we are going to fix things and avoid further contamination, but the current situation is the result of millions of small individual decisions.
3. We can get angry with the business community and certain corporations, but it must be remembered that though we will find a number of "bad guys and bad gals" in industry, the business community is made up of millions of great people, both owners and workers. The business community is where the solutions will come from. The government, media, and academia have important roles, but business will roll out the solutions. We need to find better ways to work together.
4. Finally, I don't know how much it will cost to address just the PFAS crisis and whether we can afford it, but I do know that no nation can afford to poison its children. We must make sure we are doing everything in our power to raise that next generation with the very best start we can give them.

Thank you again for giving me the chance to express to you and to those listening, what has laid so long on my heart.

Attachments:

Perfluorinated Compounds in Michigan: Current State of Knowledge and Recommendations for Future Actions, 2011, Toxics Steering Group Perfluorinated Compounds Workgroup

Michigan's Contaminant Induced Human Health Crisis: Addressing Michigan's Future By Facing the Challenge of the Evolving Nature of Environmental Contamination, 2012, Robert Delaney and Dr. Richard DeGrandchamp

Introduction to Endocrine Disrupting Chemicals: A Guide for Public Interest Organizations and Policy Makers, 2014, Endocrine Society and IPEN

Number of PFOS, PFOA, and PCB 153 Molecules in the Blood of an Average Human, 2018, Dr. Richard DeGrandchamp